REMARKS

Applicants timely filed, by mail on 9/15/03, a complete response to the outstanding 9/15/03 Office Action. However, upon further consideration, applicants have decided to further amend certain of their independent claims to more particularly point out and distinctly claim their invention.

A source of confusion lies in Blanz et al's use of the term "texture data" in his paper. As explained in the 9/15/03 response, Blanz et al's "texture data" is not what is traditionally referred to as a "texture map" representing a 2D image for mapping onto a surface as described for example in applicants' patent application at page 1 ("texture mapping involves taking a 2D image (e.g., a photographic or other digitized picture) and placing it onto a 3D surface...."). Rather, Blanz et al's "texture data" consists of a color component array representing the colors at each of the <u>vertices</u> of the 3D object geometry defined by the shape-vector.

Blanz et al is not trying to solve the same problem that applicants have solved. Blanz's approach relates to morphing of <u>geometry</u>. As described at page 1 of applicants' specification, "[p]ast advancements in 3D morphing have tended to concentrate on developing algorithms for morphing geometry between source and target objects" and those in the past have tended to morph associated textures either not at all or by using a computationally-intensive brute-force heuristic color blending approach. See pages 1-2, 7-8. Blanz et al does not try to morph textures representing 2D images. See attached document entitled "Chapter 10. Morphable Models of Faces," in which the Blanz et al

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authors later concede that their proposed algorithm suffers from inability to texture map

2D images:

> In order to model fine and identity-related details such as
> freckles, birthmarks and wrinkles, it might be helpful to
> extend our current frame work for representing texture.
> Indeed, linear combination of textures is a rather simplifying
> choice, hence improving the texture model is subject to future
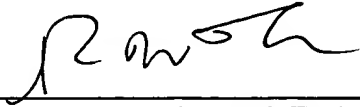> research.

Applicants have amended each of their independent claims to more particularly

point out this distinction. For example, independent claim 1 as amended requires that the

"texture map" represents "a 2D image"—thus differentiating it from Blanz et al's

"texture-vector" providing color components for geometry vertices. Note that the claim

already recites the terms "texture map" and "texel"--thereby further distinguishing it from

Blanz's approach. Applicants have similarly amended independent claims 1, 14, 27, and

32-34.

The Examiner is encouraged to contact the undersigned if there are any questions

or if the Examiner wishes to discuss or clarify any aspect of this case.

Respectfully submitted,

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